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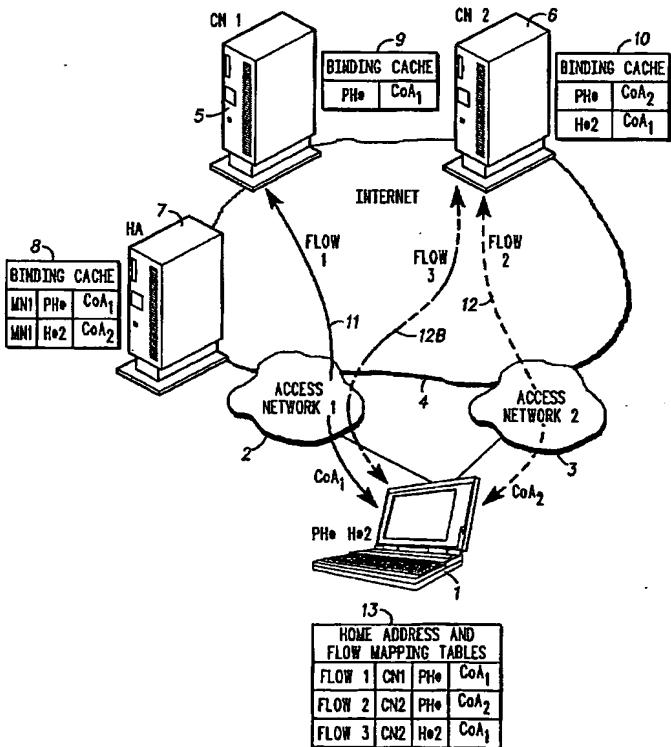
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(54) Title: DATA FLOW HANDOVER IN COMMUNICATION USING MOBILE INTERNET



(57) Abstract: A method of and a Mobile Node for communication using mobile Internet protocol between a Mobile Node (1) and Correspondent Nodes (5, 6) in a network that also comprises a Home Agent (7) for the Mobile Node. The Mobile Node (1) has a plurality of network interfaces (2, 3) with the network and performs per-flow handover management of data flows, which comprises selectively transmitting different data flows between the Mobile Node (1) and Correspondent Nodes (5, 6) over respective ones of the network interfaces (2, 3) identified by respective Internet addresses. A plurality of Home Addresses (PH@, H@z) for the Mobile Node (1) are registered with the Home Agent (7), respective ones of which are allocated dynamically to the different data flows between the Mobile Node (1) and Correspondent Nodes (5, 6), and respective network interfaces (2, 3) for the Mobile Node are allocated dynamically to the Home Addresses (PH@, H@2), so that the different data flows between the Mobile Node (1) and the same Correspondent Node (5 or 6) are allocated to respective network interfaces (2, 3) and the allocation of network interfaces (2, 3) may be modified dynamically. This method enables the handover protocols to be in conformity with the existing mobility standards, and not to require any changes on the Correspondent Node side nor in the Home Agent.

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Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

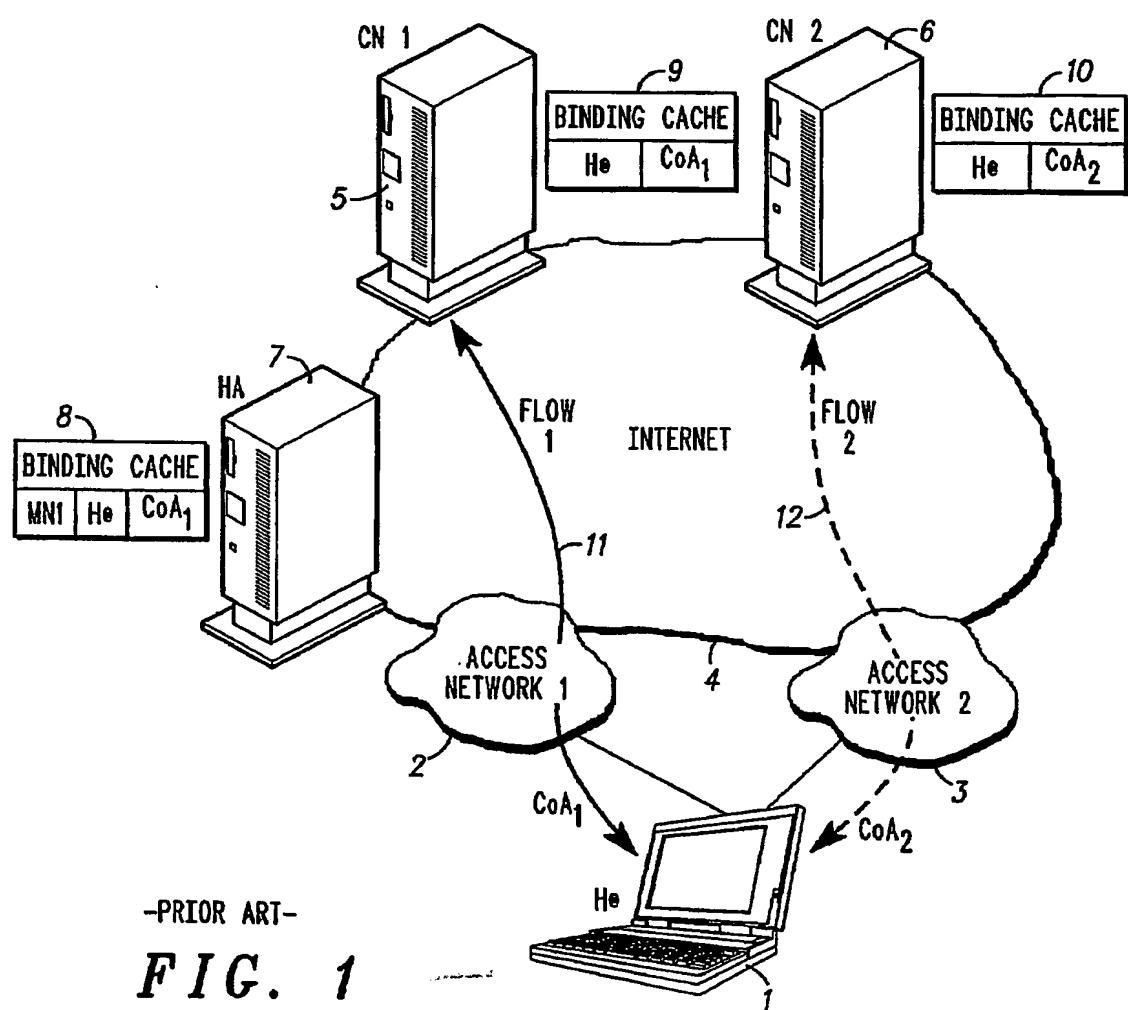
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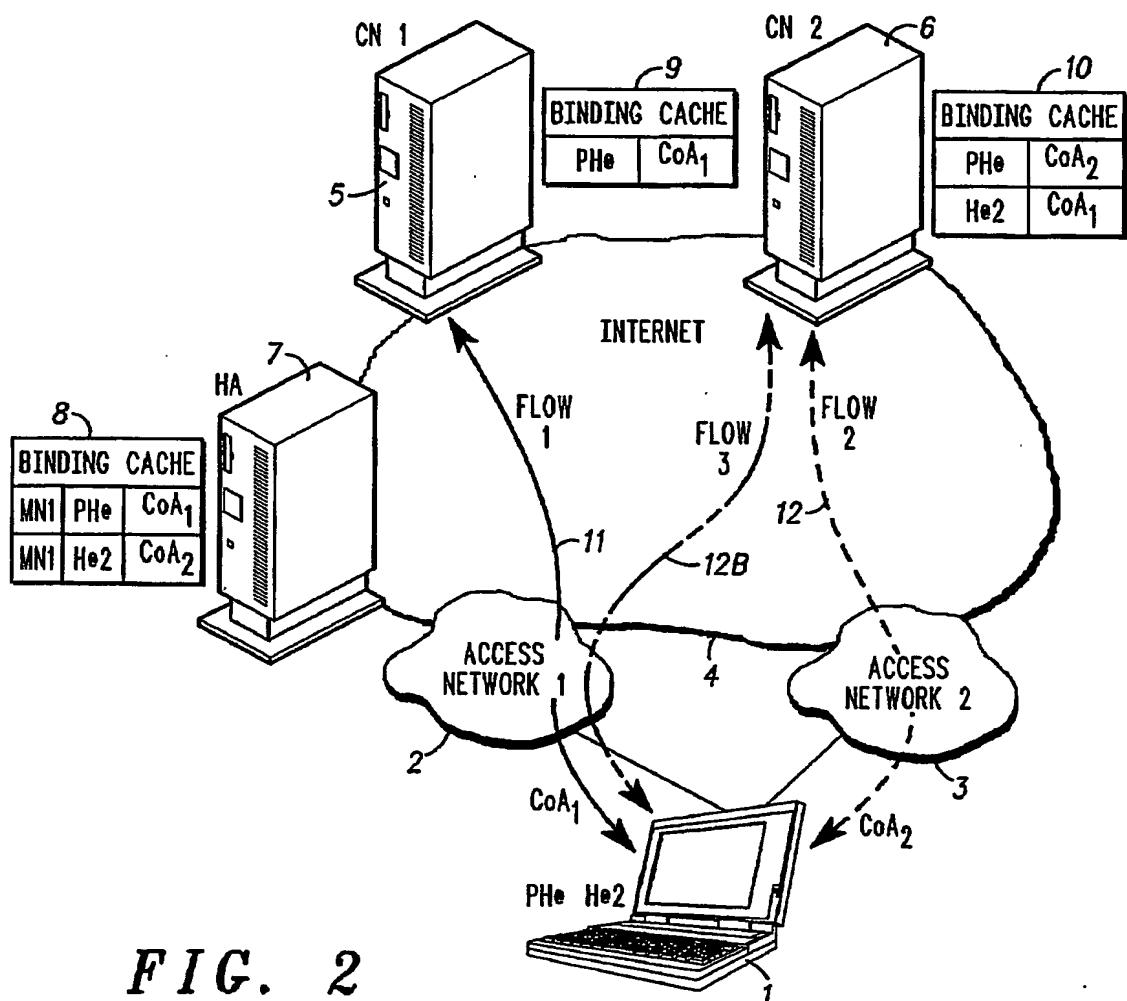


FIG. 2

HOME ADDRESS AND FLOW MAPPING TABLES			
FLOW 1	CN1	PHe	CoA ₁
FLOW 2	CN2	PHe	CoA ₂
FLOW 3	CN2	He2	CoA ₁

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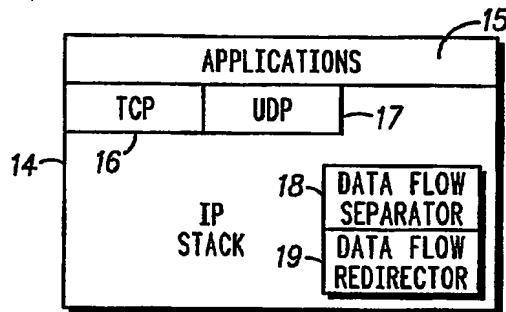


FIG. 3

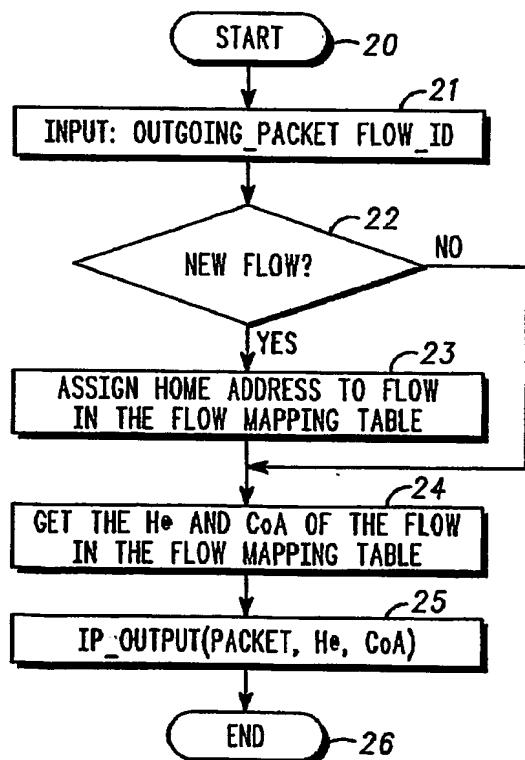


FIG. 4

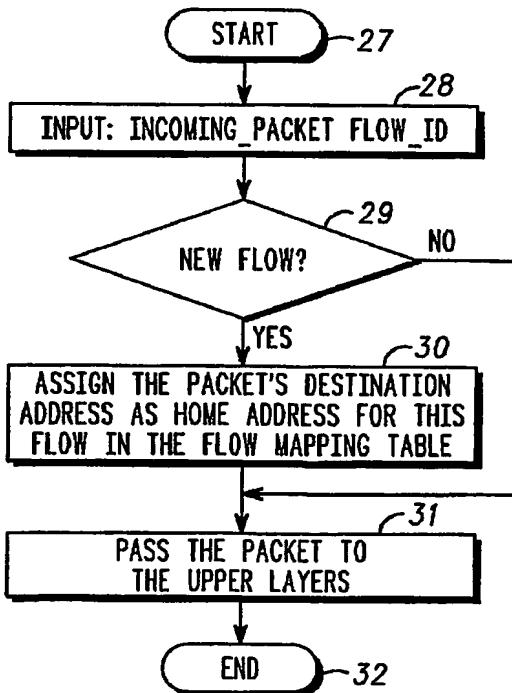
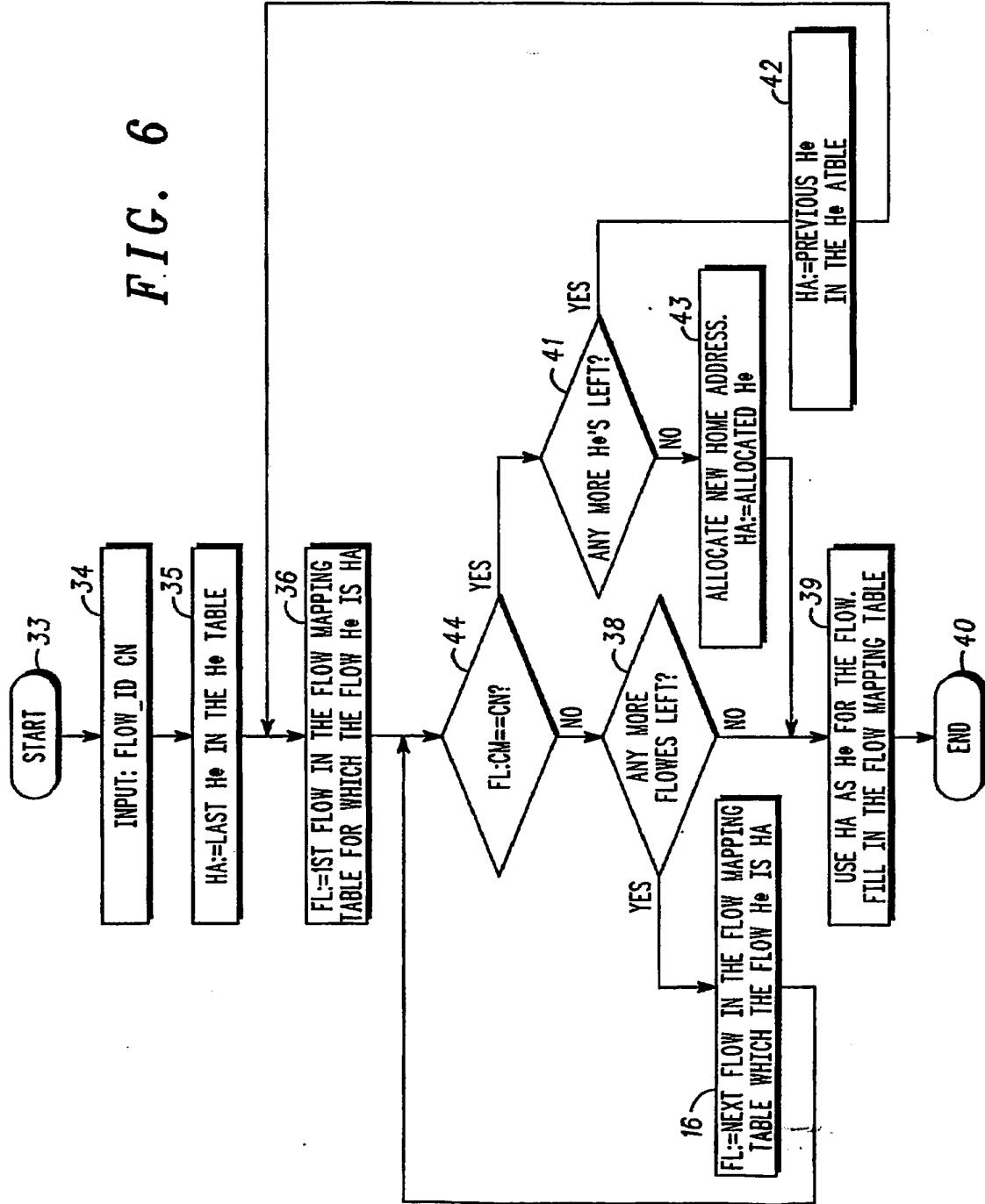


FIG. 5

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FIG. 6



INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H04L29/06 H04L12/28 H04L29/12 H04Q7/38

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 H04L H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/194259 A1 (TIMO ALAKOSKI ET AL) 19 December 2002 (2002-12-19) page 2, paragraph 16 – paragraph 17 page 2, paragraph 31 – paragraph 32 page 4, paragraph 40 – paragraph 40 page 2, paragraph 11 – paragraph 11 --- -/--	1-17

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>N. A. FIKOURAS, A. J. KOENSGEN, C. GOERG, COMNETS, IKOM, W. ZIRWAS, M. LOTT: "Filters for Mobile IP Bindings (NOMAD)" INTERNET-DRAFT, 'Online! July 2002 (2002-07), pages 1-18, XP002236721 Bremen Retrieved from the Internet: <URL:http://ietfreport.isoc.org/ids/draft-nomad-mobileip-filters-02.txt> 'retrieved on 2003-04-01! cited in the application paragraph '0001! paragraph '03.2!; figure 1</p> <hr/>	1-17

INTERNATIONAL SEARCH REPORT

Information on patent family members

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			AU 2174801 A	12-06-2001
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			WO 0141395 A1	07-06-2001